

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 2, 2011

MEMORANDUM FOR: T. J. Dwyer, Technical Director
FROM: B.P. Broderick and R.T. Davis
SUBJECT: Los Alamos Report for Week Ending September 2, 2011

Plutonium Facility: This week, LANL self-identified that a quarterly Technical Safety Requirement (TSR) surveillance for Pu-238 material-at-risk (MAR) was not performed within the required period (the surveillance should have been performed by August 13th). Facility personnel successfully completed the MAR surveillance on Thursday and verified that material inventory in the laboratory was within limits.

This TSR surveillance was one of the last controls implemented in early June to complete full implementation of the 2008 Documented Safety Analysis and associated TSRs. A Plutonium Facility worker performed the surveillance on June 2nd using an approved procedure; however, MAR inventory data from May 13th was used instead of the current inventory data called for by procedure. The facility surveillance tracking database in the operations center was tracking this quarterly surveillance based on the June date versus the May date. This week, facility personnel questioned the required time to perform the MAR surveillance, identified the discrepancy and reported the TSR violation. LANL investigation and development of corrective actions are ongoing.

Safety Basis: Last week, the site office provided direction to LANL on the processes used to manage safety system deficiencies. In particular, LASO requested the following actions within 30 days: 1) implement detailed requirements for declaring and reporting TSR violations; 2) update the New Information Process based on site office comments; 3) provide process flow charts that clarify the relations between the nonconformance reporting, new information and operability determination procedures (including draft changes to procedures, as needed); and 4) identify required training to implement these changes. When implemented, these changes should help clarify and improve site processes used to manage and resolve safety system deficiencies.

Work Planning and Control: Recently, the site office provided feedback to NNSA-Headquarters on the proposed standard for work planning and control developed by the Energy Facility Contractors Group. LASO asserts that the standard "...could be an appropriate guide or manual for maintenance work but should not be a required standard, particularly for the wide ranging research and development (R&D) and high-skill programmatic work that is the focus of [LANL's] national security and other scientific missions." LASO recommends that the standard be used as a non-mandatory guide for capturing best practices.

Transuranic Waste Operations: An unvented legacy container that holds a 0.5 g ²⁴¹Am source received from the Lovelace Respiratory Research Institute is currently staged at Area G inside a vented Standard Waste Box. LANL personnel intend to use a glovebag inside the Dome 231 Sort, Segregate, and Size Reduction (SSSR) permacon to open the legacy container and remove the ²⁴¹Am source for disposition. This week, the NNSA site office approved a one-time exemption to an Area G specific administrative control that normally prohibits opening unvented containers during SSSR operations. The exemption approval includes a number of compensatory measures to control hazards presented by hydrogen accumulation in the legacy container. LANL must also successfully complete a contractor readiness assessment, currently scheduled for September, prior to performing this work.